

**CLAIMS:**

What is claimed is:

1. A network data processing system for identifying, locating, and deleting viruses, comprising:
  - 5 a local server;
  - a plurality of client data processing systems; and
  - a bait server, wherein
    - the bait server monitors itself and, responsive to an attempt from an offending system within the network data processing system to access the bait server, the bait
    - 10 server broadcasts an indication that a virus attack is underway to all devices within the network data processing system, ignores all further access requests by the offending system until receiving an indication that the offending system has been disinfected, and directs the local server to disconnect the offending system from the network data processing system.
- 15 2. The network data processing system as recited in claim 1, wherein the address of the bait server is not published to the plurality of client data processing systems.
3. The network data processing system as recited in claim 1, wherein the offending system includes more than one data processing system.
4. The network data processing system as recited in claim 1, wherein the
  - 20 offending system includes the local server.
5. The network data processing system as recited in claim 1, wherein the offending system includes a client data processing system.

6. The network data processing system as recited in claim 1, wherein the attempt from the offending system to access the bait server comprises an attempt to write to the bait server.

7. The network data processing system as recited in claim 1, wherein the virus is  
5 a worm.

8. The network data processing system as recited in claim 1, wherein the virus is a Trojan horse.

9. The network data processing system as recited in claim 1, wherein the network data processing system is configured to, once the offending system has been  
10 disinfected of the client, allow the offending system to reconnect to the network data processing system.

10. A method for detecting the presence of a computer virus, the method comprising;

receiving, at a bait server, a request to perform a function on the bait server;  
15 identifying an offending system from which the request originated;  
alerting a local server that a virus attack is in progress and of the identity of the offending system; and  
directing the local server to disconnect the offending system from the network.

11. The method as recited in claim 10, further comprising:  
20 prior to disconnecting the offending system, notifying the offending system that it is infected with a virus.

12. The method as recited in claim 10, further comprising:  
receiving a reconnect request from the offending system;  
verifying that the offending system is disinfected and available to reconnect to  
the network; and  
5 reconnecting the offending system to the network.
13. A method in a bait server for detecting the presence of a computer virus, the  
method comprising:  
monitoring files within the bait server; and  
responsive to a change in one or more of the files within the bait server,  
10 notifying a local server that a virus attack is underway.
14. The method as recited in claim 13, wherein the change in one or more of the  
files includes a change in byte size of the one or more of the files.
15. The method as recited in claim 13, wherein the change in one or more of the  
files includes one of a missing and a deleted file.
- 15 16. A method in a bait server for detecting the presence of a computer virus, the  
method comprising:  
monitoring a network for the presence of a computer virus;  
responsive to a determination that a virus is detected, determining the identity  
of an offending system within the network from which the virus entered the network;  
20 and  
directing the local server to disconnect the offending system from the network.

17. The method as recited in claim 16, further comprising:

instructing all devices within the network to ignore all requests from the offending system until the offending system has been disinfected and is available for network communication.

5 18. The method as recited in claim 16, further comprising:

notifying a local server of the presence of the virus and the identify of the offending system.

19. The method as recited in claim 16, further comprising:

responsive to an indication that the offending system has been disinfected and  
10 responsive to a reconnect request from the offending system, reconnecting the offending system to the network.

20. A computer program product in a computer readable media for use in a data processing system for detecting the presence of a computer virus, the computer program product comprising;

15 first instructions for receiving, at a bait server, a request to perform a function on the bait server;

second instructions for identifying an offending system from which the request originated;

third instructions for alerting a local server that a virus attack is in progress  
20 and the identity of the offending system; and

fourth instructions for disconnecting the offending system from a network.

21. The computer program product as recited in claim 20, further comprising:

fifth instructions for, prior to disconnecting the offending system, notifying the offending system that it is infected with a virus.

22. The computer program product as recited in claim 20, further comprising:  
 fifth instructions for receiving a reconnect request from the offending system;  
 sixth instructions for verifying that the offending system is disinfected and  
 available to reconnect to the network; and

5 seventh instructions for reconnecting the offending system to the network.

23. A computer program product in a computer readable media for use in a data  
 processing system in a bait server for detecting the presence of a computer virus, the  
 computer program product comprising:

10 first instructions for monitoring files within the bait server; and  
 second instructions for responsive to a change in one or more of the files  
 within the bait server, notifying a local server that a virus attack is underway.

24. The computer program product as recited in claim 23, wherein the change in  
 one or more of the files includes a change in byte size of the one or more of the files.

15 25. The computer program product as recited in claim 23, wherein the change in  
 one or more of the files includes a missing file.

26. A computer program product in a computer readable media for use in a data  
 processing system in a bait server for detecting the presence of a computer virus, the  
 computer program product comprising:

20 first instructions for monitoring a network for the presence of a computer  
 virus;

second instructions, responsive to a determination that a virus is detected, for  
 determining the identity of an offending system within the network from which the  
 virus entered the network; and

third instructions for disconnecting the offending system from the network.

27. The computer program product as recited in claim 26, further comprising:  
fourth instructions for instructing all devices within the network to ignore all requests from the offending system until the offending system is reauthorized for network communication.

5 28. The computer program product as recited in claim 26, further comprising:  
fourth instructions for notifying a local server of the presence of the virus and the identify of the offending system.

29. The computer program product as recited in claim 26, further comprising:  
fourth instructions, responsive to an indication that the offending system has  
10 been disinfected and responsive to a reconnect request from the offending system to the local server, for reconnecting the offending system to the network.

30. A system for detecting the presence of a computer virus, the system comprising;  
a receiver, at a bait server, which receives a request to perform a function on  
15 the bait server;  
an identifying unit which identifies an offending system from which the request originated;  
an virus alert unit which alerts a local server that a virus attack is in progress and the identity of the offending system; and  
20 disconnection unit which disconnects the offending system from a network.

31. The system as recited in claim 30, further comprising:  
a notification unit which, prior to disconnecting the offending system, notifies the offending system that it is infected with a virus.

32. The system as recited in claim 30, further comprising:  
a reconnect request unit which receives a reconnect request from the offending  
system;  
a verification unit which verifies that the offending system is authorized to  
5 reconnect to the network; and  
a reconnecting unit which reconnects the offending system to the network.

33. A system in a bait server for detecting the presence of a computer virus, the  
system comprising:  
a monitoring unit which monitors files within the bait server; and  
10 a notification unit which, responsive to a change in one or more of the files  
within the bait server, notifies a local server that a virus attack is underway.

34. The system as recited in claim 33, wherein the change in one or more of the  
files includes a change in byte size of the one or more of the files.

35. The system as recited in claim 33, wherein the change in one or more of the  
15 files includes a missing file.

36. A system in a bait server for detecting the presence of a computer virus, the  
system comprising:

a monitoring unit which monitors a network for the presence of a computer  
virus;

20 an identifier which, responsive to a determination that a virus is detected,  
determines the identity of an offending system within the network from which the  
virus entered the network; and

a disconnection unit which disconnects the offending system from the  
network.

37. The system as recited in claim 36, further comprising:

a network protection unit which instructs all devices within the network to ignore all requests from the offending system until the offending system is reauthorized for network communication.

5 38. The system as recited in claim 36, further comprising:

a notification unit which notifies a local server of the presence of the virus and the identify of the offending system.

39. The system as recited in claim 36, further comprising:

10 a reconnection unit which, responsive to an indication that the offending system has been disinfected and responsive to a reconnect request from the offending system, reconnects the offending system to the network.